S. F. W. S.
RIODICAL
43
U.E.O. D
D 46
#4

United States Department of the Interior
Fish and Wildlife Service

Market News Leaflet 43

Washington 25, D. C. February 1961

LIBRARY
MAR 14 1961
FISH & WILDLIFE SERVICE

THE SWEDISH SHRIMP INDUSTRY 1/

1. General Description of the Industry

The Swedish shrimp industry consists of 235 shrimping vessels, 756 fishermen, and nine processing plants, engaged in peeling and canning, serving a catch that has been estimated as 9/10ths for home consumption. Despite the fact that Sweden's exports of shrimp are sizeable, Sweden is a net importer, receiving the overwhelming proportion of her imports from Norway. Swedish shrimping is carried out in the North Sea immediately to the west of the portion of Bohuslän delimited by the port of Lysekil in the south and the Norwegian frontier in the north. Because of the proximity of Norway, and the fact that these grounds, which are located essentially in the vicinity of Oslofjord are also a principal source of shrimp for the Norwegians, there has been some conflict between the Swedish and Norwegian fishermen as to the utilization of the shrimping grounds. While the respective rights of both parties are set forth the Swedish-Norwegian fishing agreement, disagreement exists between Swedish and Norwegian shrimp fisherman as to the measures to be adopted in order to preserve existing resources and to increase the daily catch; in this connection the Swedish shrimp fishermen have restricted shrimping vessel operations to three days per week per vessel (Monday-Friday only), while the Norwegians are reportedly unwilling to adhere to this voluntary limitation. In addition there are special regulations limiting the size of catches as follows:

Special Regulations for Shrimp Fishermen

A. Shrimp for fresh consumption.

A fishing team of 4 fishermen, may land a total quantity of 480 kilos of cooked shrimp per team/week.

A fishing team of 3 fishermen, may land a total quantity of 375 kilos of cooked shrimp per team/week.

A fishing team of 2 fishermen, may land a total quantity of 270 kilos of cooked shrimp per team/week.

Issued by Branch of Market News, Division of Resource Development, Bureau of Commercial Fisheries, U. S. Fish and Wildlife Service.

1/ Information supplied by United States Embassy, Stockholm, Sweden.

B. Shrimp for industrial purposes, so-called raw shrimp.

A fishing team of 4 fishermen, may land a maximum quantity of 600 kilos per week.

A fishing team of 3 fishermen, may land a maximum quantity of 450 kilos per week.

A fishing team of 2 fishermen, may land a maximum quantity of 300 kilos per week.

Maximum 50 per cent of the fixed weekly quantity may be landed during one fishing trip.

Shrimp are taken throughout the year, and, as can be derived from Table 1 below, there is no discernable pattern in the monthly variations in the size of the catch. Table 1 below sets forth the monthly catch by weight and value for 1958, the last year for which such figures are available.

Table 1.

	Metric Tons	Value (1,000 Sw.kronor)
January	184	1,006
February	118	650
March	155	751
April	215	1,060
May	181	1,032
June	140	828
July	157	885
August	157	627
September	271	1,136
October	260	1,211
November	188	963
December	121	695
Total	2,147	10,844

Attention is called to the rather sharp monthly price variations, as for instance between July and August 1958, when catches were identical in terms of weight, but prices varied 24 per cent within a single month.

Number and Type of Processing Plants

The initial processing of shrimp in Sweden takes place aboard the shrimp-boat and consists of boiling in brine. This treatment is accorded all shrimp above 9 cm in length and to those smaller ones not destined for canning. To the best of the Embassy's knowledge, there is no freezing of shrimp in Sweden, although the major Swedish food processing firm, AB Findus does freeze shrimp for the Swedish and other markets in their Danish plants.

Industrial processing of shrimp is accordingly confined to deveining and canning, processes which are conducted at nine plants all located on the Swedish west coast. Details on the operations and scope of these plants are set forth below, by individual plant:

Konservfabriken Sunnan, Strömstad.

Quantity of raw shrimp purchased in 1959 = 600 tons.

Estimated sales value = 2.5 - 3 million kronor.

This plant employs an average of 55 female and 10 male workers. 80 per cent of the plant's total production is shrimp canning, of which one third is exported and two thirds are sold on the domestic market. England, the United States, Australia, Switzerland and Belgium are the major export markets. This plant has a peeling machine of American origin, which has been in use for the past 3 years. The shrimp is packed in glass jars and tin cans. As an example of the export price, a glass jar weighing 100 grams net costs Kr. 1.75 fob. Such a jar contains 90 shrimps.

Smögens Konservfabrik, Smögen.

Quantity of raw shrimp purchased in	1958	1959	1960
	40 tons	50 tons	80 tons

Value of production in 1959 was 700,000 kronor.

The total production at this plant is sold on the domestic market. The company employs a total of 25 female workers. The shrimp is packed in both glass jars and tin cans. The price for a 60 gram glass jar is Kr. 1,40, a 100 gram jar, Kr. 2.50 and a 150 gram jar, Kr. 2.50. These are retail prices and the export prices, if any, would be approximately 30-35 per cent lower. 90 per cent of the production at this plant consists of shrimp canning. All peeling is done by hand, but the manager has indicated that he would buy a peeling machine if a good one could be obtained at a reasonable price.

Hällers Konserver, Smögen.

Quantity of raw shrimp purchased in	1958	1959	1960
	110 tons	140 tons	175 tons

Value of production in 1959 was 800,000 kronor and in 1960 1 million kronor.

This plant employs an average of 25 female workers. Shrimp canning accounts for 90 per cent of the production of this plant. The plant exports approximately 20 per cent of its total production to Italy, Portugal, England, Switzerland, Austria, and Denmark. The remainder is sold on the Swedish market. Sample prices are as follows: 70 gram glass jar, Kr. 1.28; 95 gram jar, Kr. 1.65; 100 gram glass jar, Kr. 1.75; 140 gram glass jar, Kr. 2.30. Export prices are about 7 per cent lower. This plant has no plans for mechanization. The manager indicated that in his opinion a peeling machine spoils the shrimp. He has also stated that production could be increased if additional labor were available.

AB Rudolph Carlssons Fiskexport, Smögen.

Quantity of raw shrimp purchased in	1958	1959	1960
	50 tons	75 tons	75 tons

Value of production not available.

This plant employs an average of 15 female workers. The plant's total production is sold on the Swedish market. Only tin cans are packed at this plant. The price for a 60 gram can is Kr. -.95 while a 100 gram can costs Kr. 1.25. There are no plans for further mechanization at this plant, as it is the manager's opinion that a peeling machine is too expensive in terms of the plant's requirements.

Firma Hällö-Fisk, Smögen.

Quantity of raw shrimp purchased in	1957	1958	1959	1960
	100 tons	100 tons	150 tons	200 tons

Value of production in 1959 was 1.2 million kronor.

This plant employs an average of 25 to 30 female workers. 95 per cent of production consists of shrimp canning and 40 per cent of total production is exported to Portugal, Switzerland, Austria, Denmark and Germany. 75 per cent of production is packed in glass jars, the remainder in tin cans. Export prices are: 100 grams in a glass jar, Kr. 1.55-1.65; 115 grams, Kr. 1.88; 150 grams, Kr. 2.15-2.30. . This company is planning to obtain a peeling machine. A machine of U.S. origin costs about 250,000 kronor. However, a German machine has recently been demonstrated, and the price for this machine is only 25,000 Swedish kronor. The functioning of the German machine has not been entirely satisfactory, however. The manager did not indicate which machine the company will eventually purchase.

Sannäs Konservfabrik, Sannäs.

The quantity of raw shrimp purchased in	1958	was	110 tons
	1959		110 tons
	1960		130 tons.

Value of production in 1959 was 360,000 kronor.

This plant employs an average of 25 female workers. 90 per cent of production consists of shrimp canning and the plant sells only to the domestic market. The shrimp is packed in tin cans only, and the price for a 125 gram can is Kr. 1.55. The peeling of the shrimp at this plant is done by hand, but the purchase of a German machine is planned in the near future.

Havsten Canning Co. AB, Havstenssund.

Quantity of raw shrimp purchased in	1958	1959	1960
	50 tons	60 tons	70 tons

Value of production not available.

This plant employs an average of 30 female workers. 80 per cent of the total production is shrimp canning, of which 40 per cent is exported to Denmark, Italy and England. The shrimp is packed in tin cans only. Prices are as follows: a 60 gram can costs Kr. -.97; 100 gram can costs Kr. 1.33; 125 gram can Kr. 1.45;.

Hogdals Konservfabrik, Hogdal

Quantity of raw shrimp purchased in	1958	1959	1960
	70 tons	100 tons	125 tons

The plant's value of production in 1959 was 400,000 kronor and is estimated for 1960 at 500,000 kronor. This plant employs an average of 20 female workers, and shrimp is the only item processed. 10 per cent of the total production is exported to England, Switzerland and Denmark. Most of the plant's production is packed in tin cans. All peeling at this plant is done by hand, as it is the manager's opinion that a machine is too expensive, and that the American type machine, which uses water in processing, has a tendency to drain out the flavor and natural color of the shrimp.

Sveriges Förenade Konservfabriker, Göteborg.

This plant has branches at Strömstad, Lysekil, Gullholmen, Hamburgsund and Grebbestad.

No details regarding quantity of shrimp processed or number of employees are available.

During a conversation with the export manager, the impression was gained that shrimp processing is only a small portion of the company's total production, and that shrimp is processed by this firm ~~only~~ at Strömstad ~~and~~ and periodically at Hamburgsund and Grebbestad only. Products are sold on the domestic market, as well as exported to England, France and a small quantity to the United States. All peeling is done by hand. The export manager was of the opinion that the procurement of a peeling machine was too large an investment for an uncertain industry. He stated further that the waste in connection with machine peeling is quite large.

2. Total Annual Landings of Shrimp

The overwhelming proportion of the shrimp caught by Swedish fishermen are of the species Pandalus Borealis, which are called Nordhavsräkor in Swedish. In addition, a small quantity (2 tons in 1958) of Leander Adspersus are caught as well. These latter are entirely for domestic consumption, to the best of the Embassy's knowledge.

In 1957, 2,124 metric tons of shrimp valued at 10.9 million Swedish kronor were landed by Swedish fishermen; corresponding figures for 1958 and 1959

are 2,154 MT (Value at 10.9 million Sw. kronor) and 3,214 MT (Valued at 13.8 million kronor) respectively.

Of the total landings, about 1,000 metric tons in 1957 and 1958 were used by the canning industry, while in 1959 1,200 metric tons were so used, and the estimated quantity canned in 1960 may total 1,400 metric tons. The remainder is sold for "fresh consumption".

All data is in terms of head-on shrimp. The number of shrimp per kilo of the shrimp sold for fresh consumption averages between 140 and 180, while the number of shrimp per kilo used by the canneries averages 240 to 260.

3. Vessel Operations

According to official statistics, the number of fishing boats engaged in shrimp fishing in 1958 totalled 235 boats, employing 756 fishermen. The value of these boats amounted to 8.3 million kronor. The number of trawls used by these boats totalled 766, valued at 900,000 kronor. The number of trawlers participating in the shrimp fishing has increased in the past few years and the present total is 280. The size of these trawlers ranges from 40 to 60 feet, the smallest employing two fishermen and the largest four fishermen. The modern vessels are equipped with diesel engines, with a power of between 150-200 h.p. The older vessels are equipped with raw oil motors (with a bulb that is heated and inserted in the combustion chamber before the engine can start). The horse power rating on these vessels averages 100 h.p.

According to the Agricultural Marketing Board (Jordbruksnämnden), the ownership pattern of the vessels and tackle employed in shrimping is the same as the pattern generally obtaining in the Swedish fishing industry, that is the vessel and equipment are the property of the fishermen themselves. Those fishermen who are neither owners nor part-owners are usually not wage-earners, but rather members of a "fishing team" formed by all those on board. Net income of the vessel is divided into shares, some going to members of the crew and some to part-owners and owners (see also Section 8, this report). To the best of the Embassy's knowledge, all fishing vessels and tackle are locally owned.

4. Export Prices by Type, Species and Size Groups

It has not been possible to obtain export prices by type, species and size groups as called for in the Dept.'s reference instruction, for the years 1957-1959. To the extent that information has been available, prices on canned shrimp are given by processing plant in Section one of this report. In addition the following general price information was obtained. Shrimp are sold in lots through a sub-organization of the West Coast Fishermen's Central Association (Svenska Västkustfiskarnas Centralförbund) called Västkustfiskarnas Fiskförädling (VFF). All shrimp are sold in the name of VFF at a minimum price

of 1.75 Sw. kronor/kilo. Unsold shrimp are retained by the VFF at 1.65 Sw. kronor/kilo. From the public sales price, 5 öre/kilo is deducted by the VFF for the maintainance of the guaranteed sales price, and one öre/shrimp for the administration of the organization.

5. Quantity and Value of Exports by Type of Preparation and Country of Destination

Sweden's exports of shrimp by weight, value and process for 1959, are shown in Table 2 below. These figures have been obtained from the Agricultural Marketing Board, and from the Consulate General at Göteborg.

Table 2 Swedish Exports of Shrimp - 1959

Type	Weight (Metric Tons)	Value (1,000 Sw.kr.)
Boiled and fresh	246	521
Canned	65	813
Otherwise processed**	2 (rough estimate)	53

The breakdowns above which conform to tariff items 0303300, 1605110 and 1605202 under the Brussels system were not available for previous years, as Swedish statistical groupings in use by the board of trade for the years preceding 1959 listed shrimp under "shellfish unspecified" grouped together with significant quantities of mussles and other shellfish. Both the Board of Trade and the Agricultural Marketing Board have indicated their inability to break down the export figures for previous years in the terms called for in the Dept.'s instruction. Submitted as Enclosure 1 is a breakdown of Sweden's exports of shrimp by weight, value, process and country of destination for the year 1959 only. It should be noted further that the figures provided in enclosure 1 for 1959 are preliminary in nature. Figures provided in Table 2 above are believed to include landings abroad by Swedish shrimp fishermen.

6. Current Export Controls Subsidies and Taxes

There are no export controls or special taxes affecting the Swedish shrimp industry other than quality and sanitary controls.

Products prepared by the plants are subject to control by Svenska Konservkontrollen (Swedish Canning Control), a government organization under the

---

** According to the Agricultural Marketing Board, the term "Otherwise Processed" most probably refers to frozen shrimp imported from Denmark and subsequently reexported.

Agricultural Marketing Board. The plants are required to provide the control organization upon demand with samples of their prepared products. The control organization checks the quality of the product, as against the claims on the label, and certifies the reliability of the information contained thereon. These certificates may be obtained in the Swedish, English, French and Spanish languages.

The charge for the control service is 0.6 öre per can or jar exported.

The control organization also handles the inspection of plants, raw material, processing method and equipment, and sanitary conditions at all points in the canning operation.

The shrimp industry does not receive any subsidy from the government, nor is the establishment of any such subsidy under active consideration.

7. Wage Rates for Processing

As set forth in Section 1, the shrimp processing plants are located in the Göteborg area. The male and female workers in these plants are generally part time workers who are called upon only when sufficient shrimp is landed to require their presence; most of the women employed are housewives who live in the vicinity of the canneries and are accordingly available on short notice. Some employers pay for each phase of processing separately, others for the entire process, mostly at piece rates. These workers are organized by the General Factory Workers Union (Svenska Fabriksarbetareförbundet). General wage figures are believed to be in the neighborhood of 4 Sw. kronor/hour. Union-management talks are scheculed for November 28, 1960.

8. Payment and Income of Fishermen

The fishing vessel is usually owned by one, two or three team members, of which one is generally the captain.

Boat owners as well as non-owners are regarded as private entrepreneurs and are all members of the West Coast Fishermen's Central Association (Svenska Västkustfiskarnas Centralförbund) located at Fiskhamnen, Göteborg, the majority of them associated with the Koster, Hogdal, Reso, Havstensund, Fjällbacka, Grebbestad, Gravarne and Smögen locals.

In case of disputes between owners and non-owners, each local of the Central Association has a committee with an equal number of representatives for both categories and a non-partial chairman.

Shrimp fishing is carried out only on three days of the week, while the remaining workweek is devoted to other types of fishing.

To finance the activities of the Central Association, the fishermen have contributed a fee of two per cent of the gross proceeds of sale for the past 15 years. Through their membership in the Central Association, the fishermen are also affiliated with the National Federation of Swedish Fishermen (Sveriges Fiskares Riksförbund) which comprises all Swedish fishing organizations. The fishermen are also members of the recently founded Swedish Fishermen's Unemployment Fund.

The fishing teams are paid once a week. A certain percentage of the proceeds of sales goes to the boat and the remaining amount is divided equally between all the team members. The annual total income for each team is estimated as roughly 50,000 kronor.

9. Expansion of the Catch

According to the Agricultural Marketing Board there are no plans afoot for the expansion of either the catch of shrimp (although the capability for such expansion exists, at least in the short run, if the voluntary restrictions on the size of the catch were removed or modified), or the volume of export. Expansion by types or species generally exported is unlikely in view of the fact that only two principal species exist in the grounds fished by the Swedes. Expansion of exports to the U.S. appears unlikely, in view of the small significance of Sweden's exports to the US (3 tons in 1959).

Swedish Exports of Shrimp in 1959 by Type of Processing and Principal Country of Destination

Type of Process		Metric Tons	100 Swedish Kronor
Boiled and Fresh	Norway	91	168
	Denmark	155	321
	Finland	0	16
	Switzerland	0	15
	France	0	2
Canned	Denmark	4	53
	West Germany	n.a.	15
	Great Britain	34	429
	France	3	28
	Italy	4	54
	Switzerland	3	53
	Austria	3	49
	Dutch New Guinea	1	27
	United States of America	3	53

BUREAU OF COMMERCIAL FISHERIES
MAR 13 9 34 AM '61
HAWAII AREA
HONOLULU

88138